

Title (en)
HONEYCOMB STRUCTURE AND HONEYCOMB FILTER, AND METHOD OF PRODUCING THEM

Title (de)
WABENSTRUKTUR UND WABENFILTER UND VERFAHREN ZU DEREN HERSTELLUNG

Title (fr)
STRUCTURE ET FILTRE NID-D'ABEILLE ET PROCEDE DE PRODUCTION

Publication
EP 1291061 A4 20040804 (EN)

Application
EP 01936843 A 20010604

Priority
• JP 0104688 W 20010604
• JP 2000168234 A 20000605
• JP 2001064077 A 20010307

Abstract (en)
[origin: EP1291061A1] A honeycomb structure which is a plurality of honeycomb segments (21) bonded into one piece by a bonding material (25), the honeycomb segments (21) each having a large number of through-channels (11) separated from each other by partition walls (20), the bonding material (25) being composed of components substantially same as components composing honeycomb bodies (21), and the honeycomb segments (21) being bonded to each other at their planes substantially parallel to the direction of through-channels (11), in which honeycomb structure each bonded plane (22) of each honeycomb segment (21) has a structure possessing an unbonded area (12) containing at least an edge portion opening to a periphery of its gas inlet side end face (15) and/or a periphery of its gas outlet side end face(17). With this honeycomb structure, there is no cracking caused by the thermal stress during the use, and excellent durability can be obtained. <IMAGE>

IPC 1-7
B01J 35/04; C04B 38/00

IPC 8 full level
F02M 27/02 (2006.01); **B01D 39/20** (2006.01); **B01D 53/86** (2006.01); **B01J 35/04** (2006.01); **B28B 1/00** (2006.01); **B28B 3/26** (2006.01); **C04B 35/10** (2006.01); **C04B 35/185** (2006.01); **C04B 35/19** (2006.01); **C04B 35/443** (2006.01); **C04B 35/478** (2006.01); **C04B 35/56** (2006.01); **C04B 35/565** (2006.01); **C04B 35/584** (2006.01); **C04B 37/00** (2006.01); **C04B 38/00** (2006.01); **F01N 3/02** (2006.01); **F01N 3/022** (2006.01); **F01N 3/035** (2006.01); **F01N 3/28** (2006.01)

CPC (source: EP US)
B01D 39/2068 (2013.01 - EP US); **B01J 35/56** (2024.01 - EP US); **B28B 1/002** (2013.01 - EP US); **C04B 35/10** (2013.01 - EP US); **C04B 35/185** (2013.01 - EP US); **C04B 35/19** (2013.01 - EP US); **C04B 35/195** (2013.01 - EP US); **C04B 35/443** (2013.01 - EP US); **C04B 35/478** (2013.01 - EP US); **C04B 35/56** (2013.01 - EP US); **C04B 35/565** (2013.01 - EP US); **C04B 35/584** (2013.01 - EP US); **C04B 37/001** (2013.01 - EP US); **C04B 37/005** (2013.01 - EP US); **C04B 38/0006** (2013.01 - EP US); **F01N 3/0222** (2013.01 - EP US); **F01N 3/035** (2013.01 - EP US); **F01N 3/2828** (2013.01 - EP US); **C04B 2111/00793** (2013.01 - EP US); **C04B 2235/428** (2013.01 - EP US); **C04B 2235/5228** (2013.01 - EP US); **C04B 2235/728** (2013.01 - EP US); **C04B 2235/80** (2013.01 - EP US); **C04B 2235/96** (2013.01 - EP US); **C04B 2237/083** (2013.01 - EP US); **F01N 2450/28** (2013.01 - EP US); **Y10T 29/49345** (2015.01 - EP US); **Y10T 428/1234** (2015.01 - EP US); **Y10T 428/24149** (2015.01 - EP US)

C-Set (source: EP US)
C04B 38/0006 + C04B 35/565

Citation (search report)
• [X] US 4304585 A 19811208 - ODA ISAO, et al
• [X] US 4335783 A 19820622 - MCBRAYER ROBERT D, et al
• [X] JP H02117033 U 19900919
• See also references of WO 0193984A1

Cited by
EP1790623A1; EP1726800A1; FR2878896A1; EP1703095A4; EP1736459A1; CN101945751A; EP2231384A4; EP2436663A1; EP1283067A4; EP2712668A1; US7531231B2; US7578864B2; WO03099742A1; US7387657B2; US7531145B2; US7892623B2; KR100779815B1; EP1698604A4; WO2006061488A1; US7851041B2; US7517502B2; US6942712B2; US8845952B2; US9212589B2; US7332014B2; US8071197B2; EP1726800B2; EP1489277B2; EP1676622B1; EP1676622B2

Designated contracting state (EPC)
BE DE FR

DOCDB simple family (publication)
EP 1291061 A1 20030312; EP 1291061 A4 20040804; EP 1291061 B1 20080514; EP 1291061 B2 20120118; AU 6268801 A 20011217; DE 60134016 D1 20080626; JP 2002060279 A 20020226; JP 4511065 B2 20100728; US 2003053940 A1 20030320; US 7294316 B2 20071113; WO 0193984 A1 20011213

DOCDB simple family (application)
EP 01936843 A 20010604; AU 6268801 A 20010604; DE 60134016 T 20010604; JP 0104688 W 20010604; JP 2001064077 A 20010307; US 4858402 A 20020201